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PATENT APPLICATION

Attorney Docket No. 15966-539 (CURA-39)

82/1643
#5
3-16-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Rothberg, *et al.*
ASSIGNEE: CURAGEN CORPORATION
SERIAL NO.: 09/417,386 EXAMINER: Not Yet Assigned
FILING DATE: October 13, 1999 ART UNIT: 1643
FOR: METHOD OF IDENTIFYING NUCLEIC ACIDS

March 7, 2000
Boston, Massachusetts

Assistant Commissioner for Patents
Washington, D.C. 20231

TRANSMITTAL LETTER

Sir:

Transmitted herewith for filing in the present application are the following documents:

- ☒ Information Disclosure Statement (3 pages);
- ☒ Modified Form 1449/PTO duplicate copy (2 pages);
- ☒ Copies of Cited references: A1-A3, C1-C20; and
- ☒ Return Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at 617/542-6000, Boston, Massachusetts.

No fee is believed to be due. However, if any fees are to be assessed, the Commissioner is hereby authorized to charge the balance due to the undersigned's account, Deposit Account No. 50-0311 (Reference 15966-539, CURA-39). A duplicate copy of this transmittal letter is enclosed.

Respectfully submitted,

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TRADOCS:1302498.1(RX0\$011.DOC)

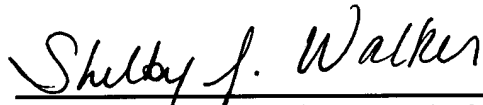
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By submitting this Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested. Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311 (Attorney Reference No. 15966-539, CURA-39).

Respectfully submitted,



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INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed below and on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application, copies of which are submitted herewith. The order of presentation of the references should not be construed as an indication of the importance of the references.

U.S. Patent Documents:

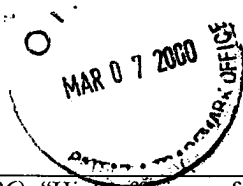
Chenchik, <i>et al.</i>	5,565,340	10/15/96
Kato, <i>et al.</i>	5,597,713	01/28/97
Rothberg, <i>et al.</i>	5,871,697	02/16/99

Foreign Patent Documents:

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Other Prior Art – Non Patent Literature Documents:

Adams, M. D., J. M. Kelley, et al. (1991). "Complementary DNA sequencing: expressed sequence tags and human genome project." <u>Science</u> 252(5013): 1651-6.
Banerjee, A. K. (1980). "5'-terminal cap structure in eucaryotic messenger ribonucleic acids." <u>Microbiol Rev</u> 44(2): 175-205.
Belyavsky, A., T. Vinogradova, et al. (1989). "PCR-based cDNA library construction: general cDNA libraries at the level of a few cells [published erratum appears in Nucleic Acids Res 1989 Jul 25;17(14):5883]." <u>Nucleic Acids Res</u> 17(8): 2919-32.
Berger, S. L. (1987). "Preparation and characterization of RNA: overview." <u>Methods Enzymol</u> 152: 215-9.
Bochnig, P., R. Reuter, et al. (1987). "A monoclonal antibody against 2.2.7-trimethylguanosine that reacts with intact, class U, small nuclear ribonucleoproteins as well as 7-methylguanosine-capped RNAs." <u>Eur. J. Biochem.</u> 68: 46-467.



Carninci, P., C+. Kvam, et al. (1996). "High-efficiency full-length cDNA cloning by biotinylated CAP trapper." <u>Genomics</u> 37(3): 327-36.
Delort, J., J. B. Dumas, et al. (1989). "An efficient strategy for cloning 5' extremities of rare transcripts permits isolation of multiple 5'-untranslated regions of rat tryptophan hydroxylase mRNA." <u>Nucleic Acids Res</u> 17(16): 6439-48.
Ederly, I., L. L. Chu, et al. (1995). "An efficient strategy to isolate full-length cDNAs based on an mRNA cap retention procedure (CAPture)." <u>Mol Cell Biol</u> 15(6): 3363-71.
Frohman, M. A., M. K. Dush, et al. (1988). "Rapid production of full-length cDNAs from rare transcripts: amplification using a single gene-specific oligonucleotide primer." <u>Proc Natl Acad Sci U S A</u> 85(23): 8998-9002.
Fromont-Racine, M., E. Bertrand, et al. (1993). "A highly sensitive method for mapping the 5' termini of mRNAs." <u>Nucleic Acids Res</u> 21(7): 1683-4.
Furuichi, Y. and K. Miura (1975). "A blocked structure at the 5' terminus of mRNA from cytoplasmic polyhedrosis virus." <u>Nature</u> 253(5490): 374-5.
Gubler, U. and B. J. Hoffman (1983). "A simple and very efficient method for generating cDNA libraries." <u>Gene</u> 25(2-3): 263-9.
Loh, E. Y., J. F. Elliott, et al. (1989). "Polymerase chain reaction with single-sided specificity: analysis of T cell receptor delta chain." <u>Science</u> 243(4888): 217-20.
Maruyama, K. and S. Sugano (1994). "Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides." <u>Gene</u> 138(1-2): 171-4.
Mathieu-Daude, F., J. Welsh, et al. (1996). "DNA rehybridization during PCR: the 'Cot effect' and its consequences." <u>Nucleic Acids Res</u> 24(11): 2080-6.
Ohara, O., R. L. Dorit, et al. (1989). "One-sided polymerase chain reaction: the amplification of cDNA." <u>Proc Natl Acad Sci U S A</u> 86(15): 5673-7.
Okayama and Berg (1982). <u>Mol. & Cell Biol.</u> 2: 161-170.
Patanjali, S. R., S. Parimoo, et al. (1991). "Construction of a uniform-abundance (normalized) cDNA library [published erratum appears in Proc Natl Acad Sci U S A 1991 Jun 1;88(11):5066]." <u>Proc Natl Acad Sci U S A</u> 88(5): 1943-7.
Shatkin, A. J. (1985). "mRNA cap binding proteins: essential factors for initiating translation." <u>Cell</u> 40(2): 223-4.
Suzuki, Y., K. Yoshitomo-Nakagawa, et al. (1997). "Construction and characterization of a full length-enriched and a 5'- end-enriched cDNA library." <u>Gene</u> 200(1-2): 149-56.

This Information Disclosure Statement is being been filed:

- ☐ within three months of the filing date of the National Application.
- ☐ within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R. §1.491, in an International Application.
- ☒ before the mailing date of a first Office Action on the merits in the above-identified case.

Accordingly, no fee or certification is required. 37 C.F.R. §1.97.

A copy of each of the above-identified information is enclosed unless otherwise indicated on the attached Form PTO-1449 (modified). It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.